

مراجعة

كيمياء عامة CH3

لطلاب السنة التحضيرية بجامعة الملك خالد
بأبها – المحالة

2015

عمل تطوعي طلابي

لا تنسى زيارة المدونة <http://kku-a.blogspot.com>

و نشر المدونة بين الطلاب لتعم الفائدة

7) The electromagnetic radiation with longest wavelength is

- a) Radio wave b) infra-red c) X-rays d) γ

5) which of the following type of radiation has the highest energy :

- a) U.V. b) Micro wave c) infra-red

d) X-rays

7) The sublevel orbital which can be occupied with maximum 14 electrons is

- a) 3d b) 4f c) 5s d) 6p

8) which set of quantum numbers can be used to characterize the sublevel 3p

- a) $n=4$ $l=1$ $m_l=0$ $m_s=+\frac{1}{2}$ b) $n=3$ $l=2$ $m_l=1$
 $m_s=-\frac{1}{2}$
 c) $n=3$ $l=1$ $m_l=1$ $m_s=-\frac{1}{2}$ d) $n=3$ $l=0$ $m_l=0$
 $m_s=+\frac{1}{2}$

9) the electronic configuration of Cu_{29} is

- a) $Ar_{18} 4s^2 3d^9$ b) $Ar_{18} 4s^1 3d^9$ c) $Ar_{18} 3d^{10} 4s^1$
 d) $Ar_{18} 4s^1 3d^{10}$



1) which of sublevel is characterized by the set of quantum numbers $n = 4$ $l = 3$ $m_l = 2$ $m_s = \frac{1}{2}$

- a) 3P b) 4d c) 4P d) 4f

10) How many unpaired electrons are there in an atom of oxygen (O)

- a) 1 b) 2 c) 3 d) 4

12) what is electronic configuration for Ni^{2+} ($\text{Ni} = 28$)

- a) $\text{Ar } 4s^2 3d^8$ b) $\text{Ar } 4s^2 3d^6$ c) $\text{Ar } 3d^8$
 d) $\text{Ar } 4s^2 3d^{10}$

13) The symbol of the element of lowest atomic number whose ground state has Six Five 3d electron

- a) ~~Fe~~ ₂₆ b) ~~Co~~ ₂₇ c) ~~Cu~~ ₂₉ d) ~~Zn~~ ₃₀

14) write the electronic configuration of Mg^{+} ($\text{Mg} = 12$)

- a) $1s^2 2s^2 2p^6 3s^2$ b) $1s^2 2s^2 2p^6$ c) $1s^2 2s^2 2p^6 3s^1$
 d) $[\text{Ne}] 3s^2$



15) The number determines the Shape of the or

- a) l b) n c) m_l d) m

16) The number of orbitals in d ~~subshell~~ sublevel

- a) 10 b) 14 c) 6 d) 5

17) The ion that is isoelectronic with Ne is

- a) Na^+ b) K^+ c) Ca^{++} d) Li

$Na=11$

$K=19$

$Ca=20$

$Li=3$

18) The energy required to remove an electron from a gas atom or ion

- a) electronegativity b) ionization energy
c) electron affinity d) none of them

19) Which of the following atoms has the greatest electronegativity

- a) I b) Br c) Cl d) F

20) Planck suggested all energy gained or lost by an atom must be some integral multiple of a minimum amount of energy called

- a) electron b) quantum c) nucleus



Which pair is given in the correct order of increase in size with respect to ionic

- a) $\text{Na}^+ > \text{Na}$ b) $\text{Cr}^{+6} > \text{Cr}^{+3}$ c) $\text{Cl} > \text{Cl}^-$
d) $\text{Ca} > \text{Mg}$

22) What is the valence shell electron configuration of Phosphorus P ?

- a) $3s^2 3p^3$ b) $3p^3$ c) $1s^2 2s^2 2p^6 4s^2$

23) The energy required to excite an electron from ground state ($n=1$) to $n=3$ is

- a) $2.73 \times 10^{-18} \text{ J}$ b) $4.70 \times 10^{-18} \text{ J}$ c) $1.94 \times 10^{-18} \text{ J}$ d) $1.7 \times 10^{-18} \text{ J}$

24) The ----- quantum number determines the orientation of an electron (Spin) in a magnetic field

- a) n b) m_s c) m_l d) l

25) Which of the following elements has the largest atomic radius?

- a) F b) B c) Be d) C
9 5 4 6

1	2	3	4	5	6	7	8	9	10	11	12	
c	c	b	d	a	d	b	c	d	d	b	c	
13	14	15	16	17	18	19	20	21	22	23	24	25
a	b	a	d	a	b	d	b	d	a	c	b	c

تعيينات بالتقوية

لا تنسونا من الدعاء

S.A مبلغ

ملاحظة) إذا اردت ان تقارن بين طاقتي مجالين

تم حساب $(n+l)$ لكل مجال

لا أكبر عدد أعلى طاقتي

انه يساوا تنظر الى n فقط n أكبر أعلى طاقتي

4s 3d

4s $n+l = 4+0 = 4$

3d $n+l = 3+2 = 5$

$\therefore 3d > 4s$

6p

7s

$n+l = 7$

$n+l = 7$

$7s > 6p$